



# **Grain Transportation Report**

A weekly publication of the Transportation and Marketing Programs/Transportation Services Branch www.ams.usda.gov/tmdtsb/grain

June 23, 2005

**Contents** 

Grain Transportation Indicators

Rail Transportation

**Barge** Transportation

Truck Transportation

**Grain Exports** 

Ocean Transportation

Brazil Transportation

> Contacts and Links

**Subscription Information** 

The next release is June 30, '05

Ocean Freight Rates Decline As Global Economic Growth Slows. Ocean freight rates continue their decline this week due to softening of world economic growth. As of June 21, 2005, the ocean freight rate for the U.S. Gulf to Japan route was \$46.49 per metric ton (mt). Down from \$55 in May, it was the lowest rate since the end of November 2003. The ocean freight rate for the Pacific Northwest (PNW) to Japan route was \$23.51 per mt, down from \$28 in May. This is the lowest rate since late September 2003. The rate for the Transatlantic route (U.S. Gulf to Rotterdam) was \$26.87, down from \$32 in May and the lowest since early July 2004.

Other reasons for the declining rates include the Chinese government's interest in curbing over-investment in the steel sector, which has weakened the demand for raw materials, such as iron ore. Weaker iron ore shipments from India, weaker coal demand from Japan, and reduced Chinese soybean imports have all contributed to the declining ocean freight rates.

Some analysts are optimistic that growth in the global economy will remain relatively healthy as China is still on track to increase imports of coal by 80 percent or more this year. Others predict further decline in ocean freight rates as many shippers defer shipments, hoping to obtain even better rates as the market continues to fall.

Finally, excess capacity created by increasing fleet supply has also contributed to declining rates. The commodity boom of recent years has led to an increase in the order of newly built vessels and the delayed scrapping of older vessels, increasing fleet supply. Reduced port congestion resulting from softer economies implied that fewer ships are tied up in traffic, consequently increasing the number of vessels available from the existing fleet on any given day. An increase in vessel supply may lead to further decline or sustain the current levels of ocean freight rates, which is welcome news to agricultural shippers.

www.drewry.co.uk, The Wall Street Journal, 6/13, Newsedge, 6/15 Surajudeen.Olowolayemo@USDA.gov

**STB Requests Fall Peak Plans from Railroads**. Surface Transportation Board (STB) Chairman, Roger Nober, asked the seven Class 1 railroads to describe their capital and operational plans for handling increased fall peak rail traffic. Chairman Nober, having made a similar request last year, asked for a response by July 15, 2005. Responses are intended to inform the Board and railroad customers of expected rail capacity during the fall peak shipping season. This information will also help railroads maintain a more fluid transportation network.

The railroads' operational plans must address: 1) the steps being taken to ascertain demand for, and prepare for fall peak; 2) performance goals for at least the next 120 days in terms of meeting service demands; and 3) the plan for achieving these goals.

The STB also requests capital plans because many past service issues have been related to insufficient capacity. Class 1 railroads should present: 1) capital plans for increasing capacity during 2005; 2) critical capacity-related infrastructure needs, how these needs will be addressed, and when improvements will be completed; and 3) a plan for communicating this information to rail customers. Responses to all questions will be made public.

To inform railroad customers of what to expect during the fall peak season, the Association of American Railroads (AAR) has scheduled the North American Railroads Customer Forum. The customer forum will be held September 21, 2005 in St. Louis, MO. It will feature presentations by the major railroads, a question-and-answer session moderated by the AAR, and remarks from the STB and other railroad associations. For more information, contact Linda Anders at 202-639-2307, or <a href="majoreaction-customermeeting@aar.org">customermeeting@aar.org</a>. <a href="majoreaction-customermeeting@aar.org">Karl.Hacker@USDA.gov</a>

#### **Grain Transportation Indicators**

Table 1--Grain transport cost indicators\*

	Truck	Rail	Barge	Oc	cean
Week ending				Gulf	Pacific
06/22/05	155	13	116	208	167
Compared with last week	<b>†</b>	n/a	<b>↓</b>	<b>↓</b>	<b>↓</b>

\*Indicator: Base year 2000 = 100; Weekly updates include truck = diesel (\$/gallon); rail = nearby secondary rail market (\$/car);

barge = spot Illinois River basis (index = percent of tariff rate); and ocean = routes to Japan (\$/metric ton)

Source: Transportation & Marketing Programs/AMS/USDA

Table 2--Market update: U.S. origins to export position price spreads (\$/bushel)

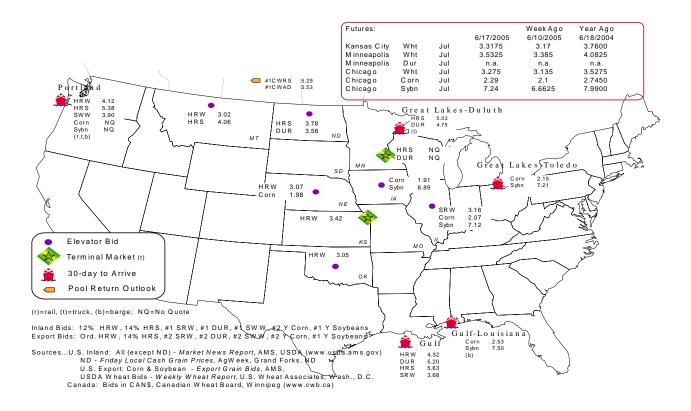
Commodity	Origindestination	6/17/2005	6/10/2005
Corn	ILGulf	-0.46	-0.47
Corn	NEGulf	-0.55	-0.57
Soybean	IAGulf	-0.61	-0.65
HRW	KSGulf	-0.90	-0.91
HRS	NDPortland	-1.60	-1.58

Note: nq = no quote

Source: Transportation & Marketing Programs/AMS/USDA

The **grain bid summary** illustrates the market relationships for commodities. Positive and negative adjustments in differential between terminal and futures markets, and the relationship to inland market points, are indicators of changes in fundamental market supply and demand. The map may be used to monitor market and time differentials.

Figure 1 **Grain bid summary** 



### **Rail Transportation**

Table 3--Rail deliveries to port (carloads)\*

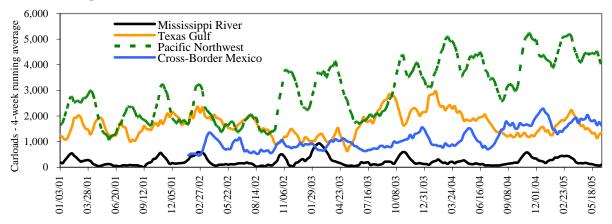
			Cross-Border	Pacific	Atlantic &	_
Week ending	Mississippi Gulf	Texas Gulf	Mexico	Northwest	East Gulf	Total
06/15/2005 <sup>p</sup>	157	1,434	1,331	3,349	37	6,308
06/08/2005 <sup>r</sup>	68	1,643	1,723	3,292	17	6,743
2005 YTD	5,908	39,058	40,412	106,248	7,204	198,830
2004 YTD	4,325	53,629	24,109	102,024	3,938	188,025
2005 as % of 2004	137	73	168	104	183	106
Total 2004	10,475	92,073	67,992	209,625	10,986	391,151
Total 2003**	14,843	88,194	48,805	157,125	20,509	329,476

<sup>(\*)</sup> Incomplete Data; as of 9/22/04, Cross-Border movements included; (\*\*) Excludes 53rd week; YTD = year-to-date; p = preliminary data; r = revised data

Source: Transportation & Marketing Programs/AMS/USDA

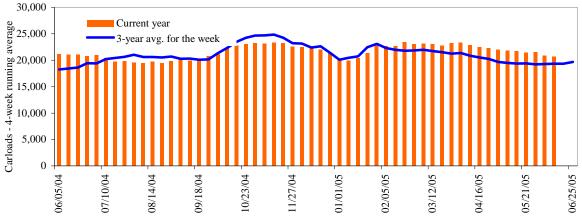
Railroads originate approximately 40 percent of U.S. grain shipments. Trends in these loadings are indicative of market conditions and expectations.

Figure 2 Rail deliveries to port



Source: Transportation & Marketing Programs/AMS/USDA

Figure 3 **Total weekly U.S. grain car loadings for Class I railroads** 



Source: Association of American Railroads

Table 4--Class I rail carrier grain car bulletin (grain carloads originated)

	E	ast		West		U.S. total	Car	nada
Week ending	CSXT	NS	BNSF	KCS	UP		CN	CP
06/11/05	2,729	3,042	8,639	372	5,931	20,713	3,217	3,801
This week last year	2,898	3,301	8,561	362	6,447	21,569	4,598	4,434
2005 YTD	69,226	77,294	213,045	14,080	138,812	512,457	97,724	92,255
2004 YTD	67,012	75,442	208,055	11,417	152,675	514,601	108,108	85,782
2005 as % of 2004	103	102	102	123	91	100	90	108
Total 2004	142,206	169,650	458,587	27,618	327,510	1,125,571	237,664	210,060

Source: Association of American Railroads (www.aar.org); YTD = year-to-date

Table 5--Rail car auction offerings, week ending 6/18/05 (\$/car)\*

Delivery for:	Jul. 05	Aug. 05	Sep. 05
BNSF <sup>1</sup>			
COT/N. grain	no bid	\$2	\$65
COT/S. grain	no bid	\$0	\$48
$UP^2$			
GCAS/Region 1	no bid	no bid	no offer
GCAS/Region 2	no offer	\$1	no offer

<sup>\*</sup>Average premium/discount to tariff, last auction

N includes: ID, MN, MT, ND, OR, SD, WA, WI, WY, and Manitoba, Canada.

S includes: CO, IA, IL, KS, MO, NE, OK, TX, NM, AZ, CA, UT, and NV.

Region 1 includes: AR, IL, LA, MO, NM, OK, TX, WI, and Duluth, MN.

Region 2 includes: CO, IA, KS, MN, NE, WY, and Kansas City and St. Joseph, MO.

Source: Transportation & Marketing Programs/AMS/USDA

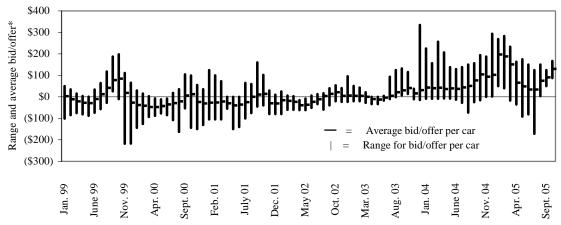
Rail service may be ordered directly from the railroad via **auction** for guaranteed service or tariff for nonguaranteed service or through the secondary market.

<sup>&</sup>lt;sup>1</sup>BNSF - COT = Certificate of Transportation

 $<sup>^{2}</sup>$ UP - GCAS = Grain Car Allocation System

The **secondary rail market** information reflects trade values for service that was originally purchased from the railroad carrier as some form of guaranteed freight. The **auction and secondary rail** values are indicators of rail service quality and demand/supply.

Figure 4 **Secondary rail car market, delivery month-year** 



\*up to 6 months of trading

Source: Transportation & Marketing Programs/AMS/USDA

**Average bid/offer** is the simple average of all the weekly bids/offers over the entire period (up to 6 months) for guaranteed railcars that are traded for delivery in a particular month.

**Range for bid/offer** shows the range of average weekly bids/offers over the entire period (up to 6 months) for guaranteed railcars that are traded for delivery in a particular month.

Table 6--Weekly secondary rail car market, week ending 6/18/05 (\$/car)\*

	Delivery period					
	Jul-05	Aug-05	Sep-05	Oct-05		
BNSF-GF	\$8	\$38	\$88	\$118		
Change from last week	\$58	-\$8	\$4	\$18		
UP-Pool	-\$172	\$8	\$63	\$125		
Change from last week	-\$42	\$4	\$6	\$0		

<sup>\*</sup>Average premium/discount to tariff, \$/car-last week

Note: Bids listed are market INDICATORS only & are NOT guaranteed prices,

 $Missing\ value = no\ bid\ quoted;\ GF = guaranteed\ freight;\ Pool = guaranteed\ pool$ 

Sources: Transportation and Marketing Programs/AMS/USDA

Data from Atwood/ConAgra, Harvest States Co-op, James B. Joiner Co., Tradewest Brokerage Co.

Table 7--Tariff rail rates for unit and shuttle train shipments\*

<b>Effective date:</b>					
6/6/2005	Origin region	Destination region	Rate/car	Rate/metric ton	Rate/bushel**
<u>Unit train*</u>					
Wheat	Chicago, IL	Albany, NY	\$1,861	\$20.51	\$0.56
	Kansas City, MO	Galveston, TX	\$2,020	\$22.27	\$0.61
	South Central, KS	Galveston, TX	\$2,335	\$25.74	\$0.70
	Minneapolis, MN	Houston, TX	\$2,420	\$26.68	\$0.73
	St. Louis, MO	Houston, TX	\$2,245	\$24.75	\$0.67
	South Central, ND	Houston, TX	\$3,709	\$40.88	\$1.11
	Minneapolis, MN	Portland, OR	\$4,198	\$46.27	\$1.26
	South Central, ND	Portland, OR	\$4,198	\$46.27	\$1.26
	Northwest, KS	Portland, OR	\$4,266	\$47.02	\$1.28
	Chicago, IL	Richmond, VA	\$2,002	\$22.07	\$0.60
Corn	Chicago, IL	Baton Rouge, LA	\$2,510	\$27.67	\$0.70
	Council Bluffs, IA	Baton Rouge, LA	\$2,440	\$26.90	\$0.68
	Kansas City, MO	Dalhart, TX	\$1,965	\$21.66	\$0.55
	Minneapolis, MN	Portland, OR	\$3,600	\$39.68	\$1.01
	Evansville, IN	Raleigh, NC	\$1,791	\$19.74	\$0.50
	Columbus, OH	Raleigh, NC	\$1,700	\$18.74	\$0.48
	Council Bluffs, IA	Stockton, CA	\$3,606	\$39.75	\$1.01
Soybeans	Chicago, IL	Baton Rouge, LA	\$2,455	\$27.06	\$0.74
	Council Bluffs, IA	Baton Rouge, LA	\$2,455	\$27.06	\$0.74
	Minneapolis, MN	Portland, OR	\$3,610	\$39.79	\$1.08
	Evansville, IN	Raleigh, NC	\$1,791	\$19.74	\$0.54
	Chicago, IL	Raleigh, NC	\$2,391	\$26.36	\$0.72
Shuttle Train*					
Wheat	St. Louis, MO	Houston, TX	\$1,895	\$20.89	\$0.57
	Minneapolis, MN	Portland, OR	\$3,898	\$42.97	\$1.17
Corn	Fremont, NE	Houston, TX	\$2,665	\$29.38	\$0.75
	Minneapolis, MN	Portland, OR	\$3,450	\$38.03	\$0.97
Soybeans	Council Bluffs, IA	Houston, TX	\$2,785	\$30.70	\$0.84
	Minneapolis, MN	Portland, OR	\$3,410	\$37.59	\$1.02

<sup>\*</sup>A unit train refers to shipments of at least 52 cars. Shuttle train rates are available for qualified shipments of more than 100 cars that meet railroad efficiency requirements.

Sources: www.bnsf.com, www.cpr.ca, www.csx.com, www.uprr.com

<sup>\*\*</sup>Approximate load per car = 100 short tons: corn 56 lbs./bu., wheat & soybeans 60 lbs./bu.

Table 8--Tariff rail rates for U.S. bulk grain shipments to the U.S.-Mexico border

Effective da	ite:					
6/6/2005	Origin state	Border crossing region	Train size	Rate/car 1	Rate/metric ton	Rate/bushel**
Wheat	KS	Brownsville, TX	Shuttle	\$2,851	\$29.13	\$0.79
	ND	Eagle Pass, TX	Shuttle	\$5,399	\$55.17	\$1.50
	OK	El Paso, TX	Shuttle	\$2,264	\$23.13	\$0.63
	OK	El Paso, TX	Unit	\$2,432	\$24.85	\$0.68
	AR	Laredo, TX	Unit	\$2,383	\$24.35	\$0.66
	IL	Laredo, TX	Unit	\$3,188	\$32.57	\$0.89
	MT	Laredo, TX	Shuttle	\$4,190*	\$42.81	\$1.16
	TX	Laredo, TX	Shuttle	\$1,993*	\$20.36	\$0.55
	MO	Laredo, TX	Shuttle	\$2,731	\$27.90	\$0.76
	WI	Laredo, TX	Unit	\$3,405	\$34.79	\$0.95
Corn	NE	Brownsville, TX	Shuttle	\$3,104	\$31.72	\$0.80
	NE	Brownsville, TX	Unit	\$3,645*	\$37.24	\$0.95
	IA	Eagle Pass, TX	Shuttle	\$3,334	\$34.07	\$0.86
	MO	Eagle Pass, TX	Shuttle	\$3,040*	\$31.06	\$0.79
	NE	Eagle Pass, TX	Shuttle	\$3,440*	\$35.15	\$0.89
	IA	Laredo, TX	Unit	\$3,258	\$33.29	\$0.84
Soybean	IA	Brownsville, TX	Shuttle	\$2,880	\$29.43	\$0.80
	MN	Brownsville, TX	Shuttle	\$3,176	\$32.45	\$0.88
	NE	Brownsville, TX	Shuttle	\$2,688	\$27.47	\$0.75
	NE	Eagle Pass, TX	Shuttle	\$2,765	\$28.25	\$0.77
	IA	Laredo, TX	Unit	\$2,918	\$29.82	\$0.81

A unit train refers to shipments of at least 52 cars. Shuttle train are available for qualified shipments of more than 100 cars that meet railroad efficiency requirements.

Sources: www.bnsf.com, www.uprr.com

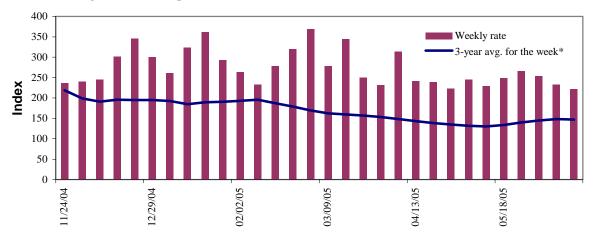
<sup>&</sup>lt;sup>1</sup>Rates are based upon published tariff rates for high-capacity rail cars.

<sup>\*</sup>High-capacity rate not available, rate estimated using published low-capacity tariff rate x 1.08

<sup>\*\*</sup>Approximate load per car = 97.87 metric tons: Corn 56 lbs/bu, Wheat & Soybeans 60 lbs/bu

#### **Barge Transportation**

Figure 5 **Illinois River barge rate index - quotes** 



Note: Index = percent of tariff rate; \*4-week moving average Source: Transportation & Marketing Programs/AMS/USDA

The **Illinois River barge rate index** averaged 183 percent of the **benchmark tariff rates** between 1999 and 2001, based on weekly market quotes. The **index**, along with **rate quotes** and **futures market** bids are indicators of grain transport supply and demand.

Table 9--Barge rate quotes: southbound barge freight

Location	6/15/2005	6/8/2005	July '05	Sept. '05
Twin Cities	284	287	293	344
Mid-Mississippi	231	243	253	326
Illinois River	221	233	244	322
St. Louis	173	178	195	313
Lower Ohio	162	169	192	320
Cairo-Memphis	161	167	186	312

Index = percent of tariff, based on 1976 tariff benchmark rate Source: Transportation & Marketing Programs/AMS/USDA

Calculating barge rate per ton:

(Index \* 1976 tariff benchmark rate per ton)/100

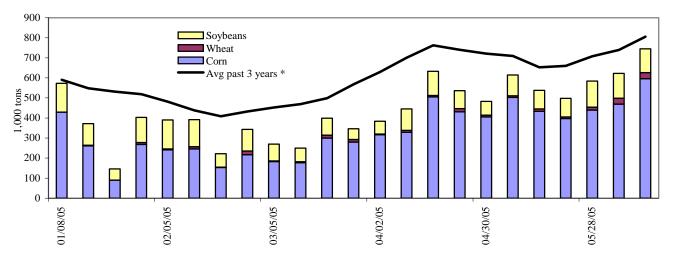
Select applicable index from market quotes included in tables on this page. The 1976 benchmark rates per ton are provided in map (see figure 6).

Note: The Illinois barge rate is for Beardstown, IL, La Grange Lock & Dam

Figure 6 **Benchmark tariff rates** 



Figure 7 **Barge movements on the Mississippi River (Locks 27 - Granite City, IL)** 



<sup>\* 4-</sup>week moving average

Source: Transportation & Marketing Programs/AMS/USDA

Table 10--Barge grain movements (1,000 tons)

Week ending 6/11/2005	Corn	Wheat	Soybean	Other	Total
Mississippi River					
Rock Island, IL (L15)	241	17	38	0	296
Winfield, MO (L25)	321	28	83	0	432
Alton, IL (L26)	577	30	120	0	727
Granite City, IL (L27)	596	30	119	0	745
Illinois River (L8)	201	2	24	2	228
Ohio River (L52)	44	2	14	0	60
Arkansas River (L1)	22	1	0	0	24
2005 YTD	9,668	715	3,572	324	14,278
2004 YTD	11,090	1,167	2,327	356	14,940
2005 as % of 2004 YTD	87	61	154	91	96
Total 2004	26,235	2,701	6,784	843	36,563

YTD (year-to-date) and calendar year total includes Miss/27, Ohio/52, and Ark/1.

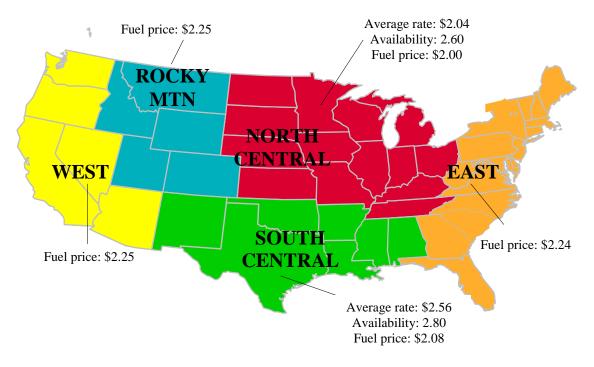
 $Source:\ U.S.\ Army\ Corp\ of\ Engineers\ (www.mvr.usace.army.mil/mvrimi/omni/webrpts/default.asp)$ 

Note: Total may not add exactly, due to rounding

<sup>&</sup>quot;Other" refers to oats, barley, sorghum, and rye.

# Truck Transportation

Figure 8
U.S. grain truck market advisory, 1st quarter 2005\*



\*Average rate per loaded mile, based on truck rates for trips of 25, 100, and 200 miles

Note: Fuel prices are a quarterly average (unit per gallon)

Fuel price data source: Energy Information Administration, U.S. Department of Energy, www.eia.doe.gov

Table 11--U.S. grain truck market overview, 1st quarter 2005

Table 11U.S. grain tru	ick market ov	erview, I q	uarter 2005	T		1	
Region/commodity*	25 miles	100 miles	200 miles	Truck availability	Truck activity	Future truck activity	
		-	-	Rating com	pared to same quart	er last year	
		Rate per mile		1=Very easy	1=M	luch lower	
	Rate per finie			to		to	
				5=Very difficult	5=M	ich higher	
National average <sup>1</sup>	2.91	1.96	1.73	2.6	2.6	2.9	
North Central region <sup>2</sup>	2.65	1.89	1.59	2.6	2.8	3.1	
Corn	3.25	2.37	2.01	2.9	2.4	3.1	
Wheat	1.52	1.44	1.39	2.6	2.9	2.9	
Soybean	3.25	2.37	2.01	2.7	2.7	3.2	
South Central region <sup>2</sup>	3.34	2.25	2.08	2.8	2.1	2.4	
Corn	3.02	2.19	1.98	2.8	2.0	2.0	
Wheat	3.13	2.18	2.08	3.0	2.3	2.7	
Soybean	4.71	2.32	2.06	2.3	2.0	2.3	

Rates are based on trucks with 80,000 lb weight limit

Source: Transportation and Marketing Programs/AMS/USDA

<sup>\*</sup>Commodity averages based on truck rates for top producing states based on National Agricultural Statistics Service/USDA

<sup>&</sup>lt;sup>1</sup>National average includes: AR, CO, IA, IL, IN, KS, LA, MN, MS, ND, NE, OH, OK, OR, SD, TX, and WA.

<sup>&</sup>lt;sup>2</sup>Commodity rates per mile include the average of the top 3 producing states within the region.

The **weekly diesel price** provides a proxy for trends in U.S. truck rates. Diesel fuel is a significant expense for truck grain movements, accounting for 37 percent of the estimated variable cost.

Table 12--Retail on-highway diesel prices\*, week ending 06/20/05 (US\$/gallon)

			Change from		
Region	Location	Price	Week ago	Year ago	
I	East Coast	2.348	0.040	0.663	
	New England	2.442	0.043	0.635	
	Central Atlantic	2.451	0.052	0.675	
	Lower Atlantic	2.296	0.035	0.660	
II	Midwest	2.294	0.046	0.642	
III	Gulf Coast	2.274	0.027	0.651	
IV	Rocky Mountain	2.236	0.026	0.401	
V	West Coast	2.391	0.027	0.432	
	California	2.476	0.019	0.457	
Total	U.S.	2.313	0.037	0.613	

<sup>\*</sup>Diesel fuel prices include all taxes.

Source: Energy Information Administration/U.S. Department of Energy (www.eia.doe.gov)

# **Grain Exports**

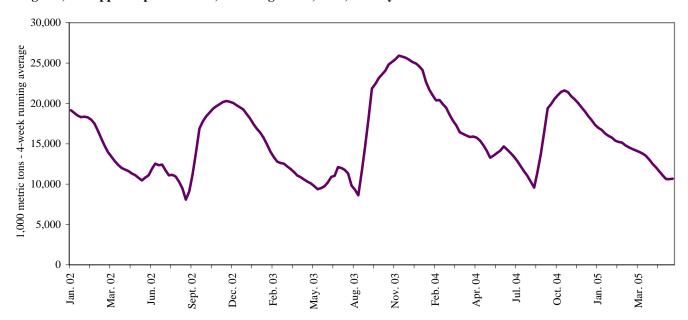
Table 13--U.S. export balances (1,000 metric tons)

	Wheat					Corn	Soybeans	Total	
Week ending 1/	HRW	SRW	HRS	SWW	DUR	All wheat			
6/9/2005	1,480	327	1,248	436	100	3,590	6,208	1,481	11,279
This week year ago	1,856	1,433	1,536	810	154	5,790	8,094	1,062	14,946
Cumulative exports-crop year 2/	,								
2004/05 YTD	170	46	207	50	27	499	35,288	28,025	63,812
2003/04 YTD	356	68	201	116	22	764	37,763	23,064	61,591
2004/05 as % of 2003/04	48	68	103	43	123	65	93	122	104
2003/04 Total	12,697	3,785	6,928	4,889	1,053	29,353	47,704	24,102	101,159
2002/03 Total	6,896	2,899	6,645	3,517	720	20,677	39,646	28,908	89,231

 $Note: \ \ YTD = year-to-date. \ \ Crop \ year: wheat = 6/01-5/31, \ corn \ \& \ soybeans = 9/01-8/31, \ 1/ = Current \ outstanding \ unshipped \ export \ sales \ to \ date \ \ outstanding \ unshipped \ export \ sales \ to \ date \ \ outstanding \ unshipped \ export \ sales \ to \ date \ \ outstanding \ unshipped \ export \ sales \ to \ date \ \ outstanding \ unshipped \ export \ sales \ to \ date \ \ outstanding \ unshipped \ export \ sales \ to \ date \ \ outstanding \ unshipped \ export \ sales \ to \ date \ \ outstanding \ unshipped \ export \ sales \ to \ date \ \ outstanding \ unshipped \ export \ sales \ \ outstanding \ unshipped \ export \ sales \ \ outstanding \ unshipped \ export \ \ outstanding \ unshipped \ export \ \ outstanding \ unshipped \ \ outstanding \ outstanding \ outstanding \ outs$ 

Source: Foreign Agricultural Service/USDA (www.fas.usda.gov)

Figure 9 U.S. grain, unshipped export balance, including wheat, corn, and soybean sales



Source: Foreign Agricultural Service/USDA (www.fas.usda.gov)

<sup>2/</sup> = New crop year in effect for wheat

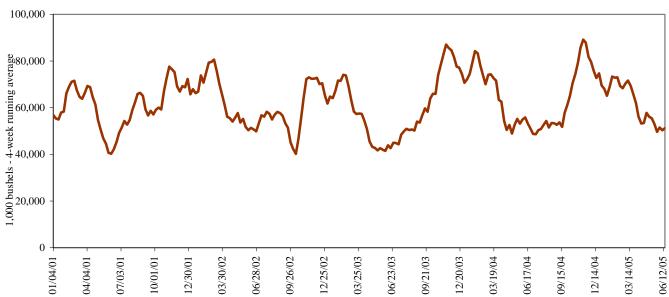
Table 14--Select U.S. port regions - grain inspections for export (1,000 metric tons)

	Pa	Pacific Region			Mississippi Gulf		ŗ	Texas Gu	lf	P	Port Region tota	al
Week ending	Wheat	Corn	Soybeans	Wheat	Corn	Soybeans	Wheat	Corn	Soybeans	Pacific	Mississippi	Texas
06/16/05	89	308	81	53	636	120	161	7	0	478	809	169
2005 YTD	4,781	4,496	3,282	2,447	12,614	7,926	2,717	275	6	12,559	22,986	2,998
2004 YTD	5,268	5,244	1,774	3,448	14,772	5,851	4,496	49	14	12,286	24,072	4,559
2005 as % of 2004	91	86	185	71	85	135	60	557	43	102	95	66
2004 Total *	12,121	9,741	4,753	7,154	32,851	15,540	7,936	131	23	26,615	55,546	8,089

Source: Federal Grain Inspection Service/USDA (www.usda.gov/gipsa); YTD: year-to-date; \* includes 53rd week

The United States exports approximately one-quarter of the grain it produces. On average, it includes nearly 45 percent of U.S.-grown wheat, 35 percent of U.S.-grown soybeans, and 20 percent of the U.S.-grown corn. Approximately 55 percent of these U.S. export grain shipments departed through the Mississippi Gulf region in 2004.

Figure 10 U.S. grain inspected for export (wheat, corn, and soybeans)



Source: Federal Grain Inspection Service/USDA (www.usda.gov/gipsa)

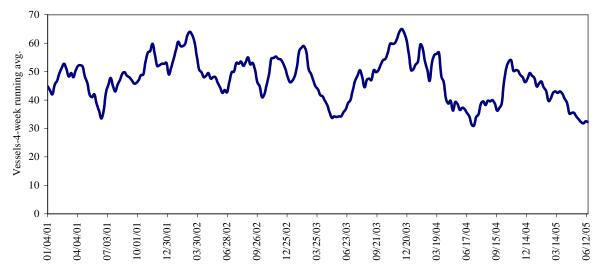
# **Ocean Transportation**

Table 15--Weekly port region grain ocean vessel activity (number of vessels)

				Pacific	Vancouver
		Gulf		Northwest	B.C.
		Loaded	Due next		
Date	In port	7-days	10-days	In port	In port
6/16/2005	14	32	51	7	4
6/9/2005	14	32	47	6	8
2004 range	(1043)	(2573)	(3896)	(416)	(018)
2004 avg.	24	45	61	9	6

Source: Transportation & Marketing Programs/AMS/USDA

Figure 11 **Gulf Port grain vessel loading (past 7 days)** 



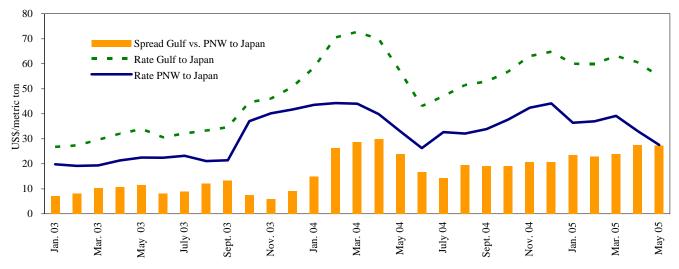
Source: Transportation & Marketing Programs/AMS/USDA

Table 16--Quarterly ocean freight rates (average rates & percentage changes) (US\$/metric ton)

Countries/ regions	2005 1st qtr	2004 1st qtr	Percent change	Countries/ regions	2005 1st qtr	2004 1st qtr	Percent change
Gulf to	_			Pacific NW to			
Japan	\$60.18	\$73.75	-18	Japan			
China	\$57.50	\$46.63	23				
Taiwan		\$68.00		Argentina/Brazil to			
N. Africa	\$48.00	\$46.25	4	N. Africa	\$59.25	\$61.07	-3
Med. Sea		\$46.50		China			

Source: Maritime Research, Inc. (www.maritime-research.com)

Figure 12 **Grain vessel rates, U.S. to Japan** 



Source: Baltic Exchange (www.balticexchange.com)

Table 17--Ocean freight rates for selected shipments, week ending 06/18/05

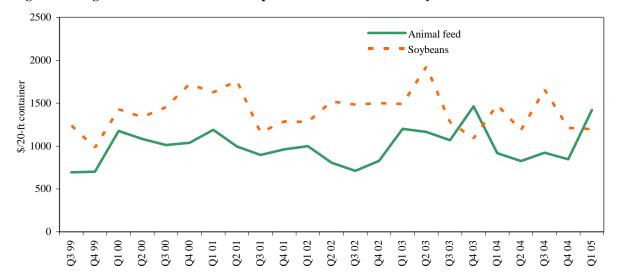
Export region	Import region	Grain	Month	Volume loads (metric tons)	Freight rate (\$/metric ton)
U.S. Gulf	Djibouti*	Wheat	Jun 1/10	22,740	89.29
U.S. Gulf	Ireland	Grains	Jun 13/17	20,000	32.50
U.S. Gulf	Algeria	Hvy Grain	Jun 10/15	25,000	42.50
St. Lawrence	S. Africa	Wheat	Jun 10/20	34,000	42.00
Great Lakes	Algeria	Hvy Grain	Jun 20/30	18,000	57.00
River Plate	Turkey	Soybean	Jun 1/8	20,000	49.00

Rates shown are for metric ton (2,204.62 lbs. = 1 metric ton), F.O.B., except where otherwise indicates; op = option

Source: Maritime Research Inc. (www.maritime-research.com)

<sup>\*</sup>Most food aid from the United States is required to be shipped on U.S. flag vessels. The vessels are limited in availability resulting in higher rates. In addition, destinations receiving food aid generally lack adequate port unloading facilities, requiring the vessel to remain in port for a longer duration than normal.

Figure 13
Weighted average rates<sup>1</sup> for containerized shipments of animal feed and soybeans to selected Asian countries



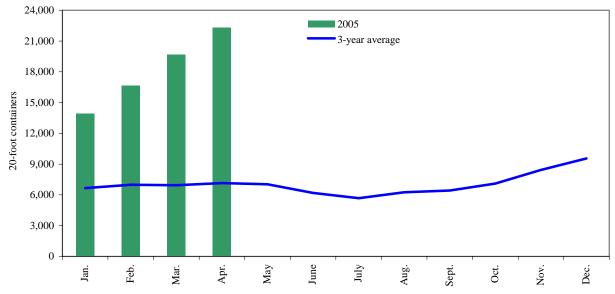
<sup>&</sup>lt;sup>1</sup>Animal Feed: Busan-Korea (22%), Kaohsiung-Taiwan (28%), Tokyo-Japan (38%), Hong Kong (9%), Bangkok-Thailand (3%) and soybeans: Busan-Korea (1%), Keelung-Taiwan (81%), Tokyo-Japan (12%), Bangkok-Thailand (4%), Hong Kong (1%) Quarter 1, 2005.

Source: Ocean Rate Bulletin, Transportation & Marketing Programs/AMS/USDA

Container ocean freight rates – average rate per twenty-foot equivalent unit (TEU) weighted by shipping line market share and trade route.

The percentage of U.S. grain exported in containers was 3 percent in 2004.

 ${\bf Figure~14} \\ {\bf Monthly~shipments~of~containerized~grain~to~Asia~for~2005~compared~with~a~3-year~average} \\$ 

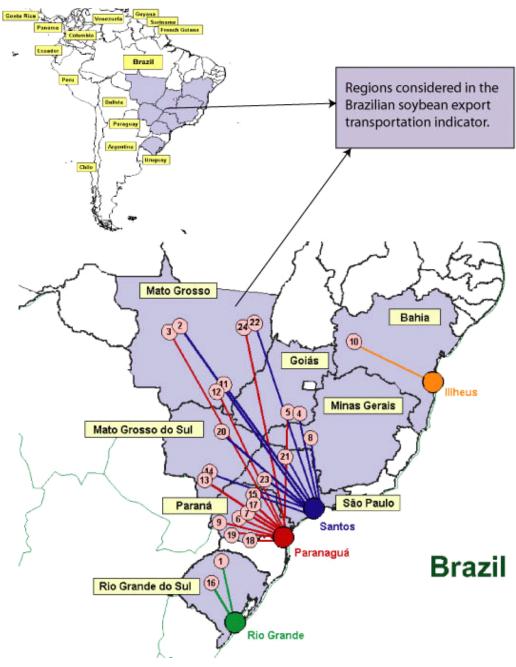


Source: Port Import Export Reporting Service (PIERS), Journal of Commerce

Note: PIERS data is available with a lag of approximately 40 days

# **Brazil Transportation**

Figure 15
Routes and Regions considered in the Brazilian soybean export transportation indicator<sup>1</sup>



<sup>&</sup>lt;sup>1</sup>Regions comprised 84 percent of Brazilian soybean production, 2003 Source: ESALQ/USP (University of São Paulo, Brazil) and USDA/AMS

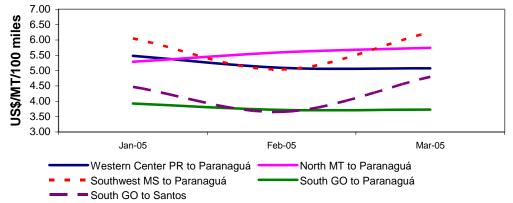
Table 18--Truck rates for selected Brazilian soybean export transportation routes, 1st quarter 2005

	Origin <sup>1</sup>		Distance		Freight price
Route #	(reference city)	Destination	(miles) <sup>2</sup>	Weight(%) <sup>3</sup>	(per 100 miles) <sup>4</sup>
1	Northwest RS <sup>5</sup> (Cruz Alta)	Rio Grande	288	16.6	4.46
2	North MT(Sorriso)	Santos	1190	10.1	5.86
3	North MT(Sorriso)	Paranaguá	1262	9.5	5.54
4	South GO(Rio Verde)	Santos	587	7.0	4.40
5	South GO(Rio Verde)	Paranaguá	726	5.6	3.79
6	North Center PR(Londrina)	Paranaguá	268	4.4	7.19
7	Western Center PR(Mamborê)	Paranaguá	311	3.9	5.22
8	Triangle MG(Uberaba)	Santos	339	3.8	7.28
9	West PR(Assis Chateaubriand)	Paranaguá	377	3.7	5.83
10	West Extreme BA(São Desidério)	Ilhéus	544	3.6	6.53
11	Southeast MT(Primavera do Leste)	Santos	901	3.6	6.18
12	Southeast MT(Primavera do Leste)	Paranaguá	975	3.3	6.22
13	Southwest MS(Maracaju)	Paranaguá	612	3.1	5.78
14	Southwest MS(Maracaju)	Santos	652	2.9	5.84
15	West PR(Assis Chateaubriand)	Santos	550	2.5	6.18
16	Western Center RS(Tupanciretã)	Rio Grande	273	2.4	5.03
17	Southwest PR(Chopinzinho)	Paranaguá	291	2.3	6.00
18	Eastern Center PR(Castro)	Paranaguá	130	2.3	10.20
19	South Center PR(Guarapuava)	Paranaguá	204	2.1	8.39
20	North Center MS(São Gabriel do Oeste)	Santos	720	2.0	5.39
21	Ribeirão Preto SP(Guairá)	Santos	314	1.5	6.38
22	Northeast MT(Canarana)	Santos	950	1.4	6.66
23	Assis SP(Palmital)	Santos	285	1.2	6.16
24	Northeast MT(Canarana)	Paranaguá	1075	1.2	5.90
	Average		626	100	5.67

Although each origin region comprises several cities, the main city is considered as a reference to establish the freight price

Figure 16

Truck rates for selected Brazilian soybean export transportation routes



Source: ESALQ/ USP (University of São Paulo, Brazil) and USDA/AMS

<sup>&</sup>lt;sup>2</sup>Distance from the main city of the considered region to the mentioned ports

<sup>&</sup>lt;sup>3</sup>The weight is directly proportional to the amount of production in each region

<sup>&</sup>lt;sup>4</sup>US\$ per metric ton (average monthly exchange rate from "Banco Central do Brasil" was used to convert Brazilian reais to the U.S. dollar)

<sup>&</sup>lt;sup>5</sup>RS = Rio Grande Do Sul, MT= Mato Grosso, GO = Goiás, PR = Paraná, MG = Minas Gerais, BA = Bahia, MS = Mato Grosso Do Sul, SP = São Paulo Source: ESALQ/USP (University of São Paulo, Brazil) and USDA/AMS

Table 19--Monthly Brazilian soybean export truck transportation cost index

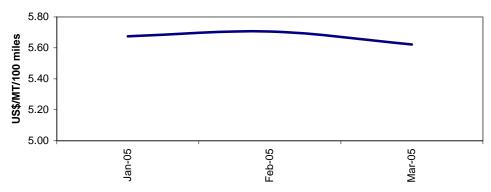
Month	Freight price* (per 100 miles)	Index variation (%) (Base: prior month)	Index value (Base: Jan. 05 = 100)
Jan. 05	5.67		100.00
Feb. 05	5.71	0.5	100.54
Mar. 05	5.62	-1.5	99.08

<sup>\*</sup>weighted average and quoted in US\$ per metric ton

Source: ESALQ/USP (University of São Paulo, Brazil) and USDA/AMS

Figure 17

Brazilian soybean export truck transportation weighted average prices, 2005



Source: ESALQ/USP (University of São Paulo, Brazil) and USDA/AMS

Table 20--Quarterly ocean freight rates for shipping soybeans from selected Brazilian ports to Hamburg, Germany (US\$/metric ton)\*

	2005	
Ports	1st qtr	
Santos	\$45.53	
Paranagua	\$44.64	
Rio Grande	\$44.20	

<sup>\*</sup>correspond to the average actual values negotiated between shippers and carriers and weighted according to the magnitude of the shipped volumes Source: Sistema de Informações de Fretes, SIFRECA, ESALQ/USP (University of São Paulo, Brazil)

#### **Contacts and Links**

#### **Contact Information**

Coordinator Surajudeen (Deen) Olowolayemo	surajudeen.olowolayemo@usda.gov	(202) 690-1328
Grain Transportation Indicators Surajudeen (Deen) Olowolayemo	surajudeen.olowolayemo@usda.gov	(202) 690-1328
Rail Marvin Prater Johnny Hill	marvin.prater@usda.gov johnny.hill@usda.gov	(202) 690-6290 (202) 720-4211
Barge Transportation Karl Hacker Nicholas Marathon	karl.hacker@usda.gov nick.marathon@usda.gov	(202) 690-0152 (202) 690-0331
Truck Transportation Karl Hacker John Batson	karl.hacker@usda.gov john.batson@usda.gov	(202) 690-0152 (202) 690-1312
Grain Exports Johnny Hill	johnny.hill@usda.gov	(202) 720-4211
Ocean Transportation Surajudeen (Deen) Olowolayemo (Freight rates and vessels) April Taylor	surajudeen.olowolayemo@usda.gov	(202) 690-1328 (202) 690-1326
(Container rates) Johnny Hill (Vessels)	april.taylor@usda.gov johnny.hill@usda.gov	(202) 720-4211

**Subscription Information:** To subscribe to the GTR for a weekly email copy, please contact Deen Olowolayemo at <a href="mailto:surajudeen.olowolayemo@usda.gov">surajudeen.olowolayemo@usda.gov</a> or 202-690-1328 (1303) (printed copies are also available upon request).

#### **Related Websites**

Agricultural Container Indicators
Ocean Rate Bulletin

http://www.ams.usda.gov/tmd2/agci/http://www.ams.usda.gov/tmd/Ocean/index.asp

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation or martial or family status. (Not all prohibited bases apply to all programs). Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact the USDA's TARGET Center at (202)720-2600 (Voice and TDD).

To file a complaint of discrimination, write USDA, Director of Civil Rights, Room 326-W, Whitten Building, 14<sup>th</sup> and Independence Avenue, SW, Washington, DC 20250-9410, or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

GTR 20 June 23, 2005